Table 1: Modifications to the RBR Class for EDOS RBRs
RTM Baseline 1/25/97
CCR # 97-0164A

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clarification
EDOS-4.1.2.13 #B	8221	mission essential ~~critical~~	SDPS	interface	demo	un-verified	demo	un-verified	EDOS shall provide the capability to store DEDS received from the LaRC DAAC.		
EDOS-4.3.1.4# B	8153	mission critical ~~essential~~	FOS | CSMS	performance | interface	analysis	un-verified	analysis	un-verified	The EOC shall provide the capability to transfer Operations Management data to EDOS at a rate up to 49 kbps.		
EDOS-4.3.3.1# B	8261	mission essential ~~critical~~	SDPS	performance	demo	un-verified	demo	un-verified	The GSFC DAAC shall provide the capability to initiate transfer of the PDS/EDS Acceptance Notification to EDOS within a time period of 15 minutes plus an additional 15 minutes for each gigabyte of EDS data,		

									after successful receipt of the PDS/EDS Delivery Record from EDOS.		
EDOS-4.3.3.2#B	8262	mission essential critical	SDPS	performance	demo	un-verified	demo	un-verified	The GSFC DAAC shall provide the capability to initiate transfer of the PDS/EDS Acceptance Notification to EDOS within a time period of 15 minutes plus an additional 15 minutes for each gigabyte of PDS data, after successful receipt of the PDS/EDS Delivery Record from EDOS.		

Table 2: Modifications to the RBR Class for AM-1 RBRs
RTM Baseline 1/25/97
CCR # 97-

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clarification
AM1-0310#B	8701	mission essential	SDPS	procedural	inspection demo	un-verified	inspection demo	un-verified	The ECS contractor shall provide and the AM-1 spacecraft vendor shall receive training on operations of the FOS.	M&O will support	
AM1-0315#B	8703	mission essential	SDPS	procedural	inspection demo	un-verified	inspection demo	un-verified	The ECS contractor shall provide and the AM-1 instrument teams shall receive training on operations of the IST toolkit.	M&O will support	
AM1-0320#B	8704	mission essential	SDPS	procedural	inspection demo	un-verified	inspection demo	un-verified	The AM-1 spacecraft vendor shall provide and the ECS contractor shall receive AM-1 spacecraft operations	M&O will support.	

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clarification
									training.		
AM1-0330#B	8705	mission essential	SDPS	procedural	inspectiondemo	un-verified	inspection demo	un-verified	The AM-1 instrument teams shall provide and the ECS contractor shall receive AM-1 instrument operations training.	M&O will support.	

Table 3: Modifications to the RBR Class for NI RBRs
RTM Baseline 1/25/97
CCR # 97-

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clarification
NI-0110#B	7148	mission essential critical	FOS | CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to communicate with the NCC via the EBnet interface.		
NI-0120#B	6389	mission essential critical	FOS	interface	test	un-verified	test	un-verified	ECS shall have the capability to send TDRSS schedule requests to the NCC. These messages will be defined in the ICD		

									Between the GSFC MOCs and the NCCDS .		
NI-0130#B	2048	~~TBD~~ mission critical	FOS	interface	demo ~~TBD~~	un-verified	demo	un-verifie d	ECS shall have the capability to receive schedule result messages from the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.		
NI-0140#B	2050	~~TBD~~ mission critical	FOS	interface	demo ~~TBD~~	un-verified	demo	un-verifie d	ECS shall have the capability to receive TDRSS schedule messages from the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.		
NI-0150#B	7963	mission ~~essential~~ critical	FOS	interface	test	un-verified	test	un-verifie d	ECS shall have the		

									capability to send other non-telemetry data messages to the NCC, which includes at a minimum status and reconfiguration messages. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.		
NI-0160#B	8683	mission ~~essential~~ <u>critical</u>	FOS	interface	test	un-verified	test	un-verified	ECS shall have the capability to receive other non-telemetry data messages from the NCC, which includes at a minimum status and reconfiguration messages. These messages will be defined in the ICD Between the GSFC MOCs		

									and the NCCDS.		
NI-0170#B	2057	~~TBD~~ mission critical	FOS	interface	demo ~~TBD~~	un-verified	demo	un-verified	ECS shall have the capability to communicate with the NCC to coordinate support from GN, DSN, and WOTS for EOS missions. This interface is defined in the Operations Interface Procedures Between the Network Control Center (NCC) and the Spaceflight Tracking and Data Network Users.		
NI-0310#B	7964	mission ~~essential~~ critical	FOS | CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to communicate with the FDF via the EBnet interface		
NI-0330#B	7965	mission ~~essential~~ critical	FOS	interface	test	un-verified	test	un-verified	ECS shall have the capability to send a subset	AM-1 mission only.	

									of EOS spacecraft telemetry stream to the FDF, which includes the following: a. Attitude sensor data b. Navigation telemetry data c. Spacecraft maneuver telemetry data Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.		
NI-0340-b#B	2073	~~TBD~~ missionc ritical	FOS	interface	demo ~~TBD~~	un-verified	demo	un-verifie d	ECS shall have the capability to receive planning and scheduling information for		

									the EOS spacecraft and instruments from the FDF (AM-1 mission-specific products). Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.		
NI-0350#B	7966	missioncritical~~mission essential~~	FOS	interface	test	un-verified	test	un-verified	ECS shall have the capability to receive parameters necessary for spacecraft command data generation from the FDF, including the following: a. Navigational	AM-1 mission only.	

									operations parameters b. Spacecraft maneuver parameters Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.		
NI-0360#B	8684	missionc ritical~~mi ssion essential~~	SDPS	interface	test	un-verified	test	un-verifie d	ECS shall have the capability to send a notification of orbit or attitude quality checks and request updated (refined/repair ed) orbit or attitude data from the FDF when necessary. Mission-		

									specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents and FDF-developed ICDs.		
NI-0365#B	8687	missioncritical~~mission essential~~	SDPS	interface	test	un-verified	test	un-verified	ECS shall have the capability to receive from FDF a notification of orbit or attitude quality checks. Mission-specific requirements for FDF support of EOS missions will be documented in the EOS mission-level Detailed Mission Requirements documents		

									and FDF-developed ICDs.		
NI-0400#B	6392	missioncritical~~mission essential~~	CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to interface with NASA Data Processing Facilities (including the GSFC SDPF) via EBnet to receive the following data (at a minimum): a. Science data b. Ancillary data c. Orbit data		
NI-0440#B	8691	missioncritical~~mission essential~~	CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to receive information regarding fault status and estimated time to repair or resolve NOLAN faults that may affect the quality of NOLAN services between ECS and its users.		
NI-	8693	missionc	CSMS	interface	test	un-	test	un-			

0450#B		ritical~~mission essential~~				verified		verified	ECS shall have the capability to receive periodic summary information about faults that may have affected the quality of NOLAN services between ECS and its users.		
NI-0460#B	6397	mission critical ~~fulfillment~~	CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to receive periodic information regarding EBnet network performance and link utilization.		
NI-0470#B	8694	missioncritical~~mission essential~~	CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to receive notifications of security breaches at NOLAN sites or within the NOLAN network that could		

									potentially affect ECS sites.		
NI-0480#B	8696	missioncritical~~mission essential~~	CSMS	interface	test	un-verified	test	un-verified	ECS shall have the capability to send to NOLAN notifications of security breaches at ECS facilities that could affect NOLAN and other EOSDIS sites.		
NI-1000#B	3386	missioncritical ~~TBD~~	FOS | SDPS | CSMS	interface	analysis ~~TBD~~	un-verified	analysis	un-verified	ECS functions shall have an operational availability (computed as defined in the Functional and Performance Requirements Specification for the ECS) of 0.96 at a minimum and a Mean Down Time (MDT) of four (4) hours or less, unless otherwise specified.		
NI-1010#B	2094	missioncritical ~~TBD~~	FOS	interface	analysis ~~TBD~~	un-verified	analysis	un-verified	The ECS FOS shall have an		

									operational availability of 0.9998 at a minimum and a MDT of one (1) minute or less for critical real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety		
NI-1030#B	2095	missioncritical ~~TBD~~	FOS	interface	analysis ~~TBD~~	un-verified	analysis	un-verified	The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or		

									less for non-critical real time functions.	
NI-1060#B	3388	missioncritical ~~TBD~~	FOS | CSMS	interface	test ~~TBD~~	un-verified	test	un-verified	The ECS shall contribute a loop delay of not greater than 2.5 seconds of the total system delay of five (5) seconds for emergency real time commands, not including the time needed for command execution. The loop delay is measured from the originator to the spacecraft/instrument and back and only applies when a TDRSS link is available for contact to the spacecraft.	

Table 4: Modifications to the RBR Class for NSI RBRs
RTM Baseline 1/25/97
CCR # 97-

RBR_id	req_key	req_category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	text	interpretation text	clarification
NSI-0010#B	8722	N/A_procedural cedural	N/A_procedural~~CSMS~~	procedural	not verified by ECS~~inspection~~	N/A_procedural~~un-verified~~	not verified by ECS~~inspection~~	N/A_procedural~~un-verified~~	NSI, responsible for EOSDIS "Mission Success" network services, shall provide network connectivity to the following ECS facilities: a. ECS at the GSFC DAAC, Goddard Space Flight Center (GSFC), Greenbelt, Maryland b. EOS Operations Center (EOC), Gorddard Space Flight Center (GSFC), Greenbelt, Maryland c. System Monitoring and Coordination facility (SMC),		This requirement is levied on NSI not ECS.

									Goddard Space Flight Center (GSFC), Greenbelt, Maryland d. ECS at the EDC DAAC, Earth Resources Observation System (EROS) Data Center (EDC), Sioux Falls, South Dakota e. ECS at the JPL DAAC, Jet Propulsion Laboratory (JPL), Pasadena, California f. ECS at the LaRC DAAC, Langley Research Center (LaRC), Hampton, Virginia g. ECS at the NSIDC DAAC, University of Colorado, National Snow and Ice Data Center		

				procedural					(NSIDC), Boulder, Colorado h. ECS at the ASF DAAC, University of Alaska, Alaska Synthetic Aperture Radar (SAR), Fairbanks, Alaska		
NSI-0020#B	8723	N/A_procedural	N/A_procedural~~CSMS~~	procedural	not verified by ECS	N/A_procedural	not verified by ECS	N/A_procedural	NSI shall provide support for TCP/IP communication protocols and services to ECS.		This requirement is levied on NSI not ECS

TABLE 5: RBR to L4 Additions
RTM Baseline 1/25/97
CCR 97-

RBR_ID	L4_ID
EDOS-4.2.2.5#B	C-ISS-02330

TABLE 6 : RBR to L4 Deletions
RTM Baseline 1/25/97
CCR 97-

RBR_ID	L4_ID
~~EDOS-4.2.2.5#B~~	~~C-ISS-02350~~